



AP/1745
IFW

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Applicant:	Daniel O. Jones et al.	§	Art Unit:	1745
Serial No.:	09/773,704	§		
Filed:	January 31, 2001	§	Examiner:	Raymond Alejandro
Title:	Technique And Apparatus To Control The Response Of A Fuel Cell System To Load Transients	§	Docket No.	PUG.0056US (734)

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

REPLY BRIEF

Dear Sir:

Applicant submits the following reply to the Examiner's Answer.

I. GROUPING OF THE CLAIMS

Claims 1 and 8 are grouped together; claims 4 and 5 are grouped together; claims 6 and 7 are grouped together; and claims 2, 3 and 19 are separately patentable.

Date of Deposit: July 14, 2004

I hereby certify under 37 CFR 1.8(a) that this correspondence is being deposited with the United States Postal Service as **first class mail** with sufficient postage on the date indicated above and is addressed to Mail Stop **Appeal Brief-Patents**, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Janice Munoz

II. REPLY TO EXAMINER'S ARGUMENTS

A main point of contention between the Examiner and the Applicant appears to be whether the claim limitations that are not explicitly taught by Bonnefoy are somehow inherent in Bonnefoy.

Regarding claim 1, as set forth in the Appeal Brief, Bonnefoy fails to explicitly or implicitly teach a.) determining whether to route power not produced by a fuel cell stack and not consumed by a first load to a second load; and b.) based on this determination, selectively routing at least some of this power to a second load.

For a limitation to be inherent in a reference, the limitation must necessarily flow from the reference. M.P.E.P. § 2122; *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990). Inherency "may not be established by probabilities or possibilities." *In re Robertson*, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999). The Examiner's arguments are not probative of whether the missing claim limitations are beyond a mere probability or possibility, as the arguments advanced by the Examiner fail to show why the missing claim limitations necessarily flow from Bonnefoy.

Instead of making a determination of whether to route power not produced by a fuel cell and not consumed by a first load to a second load, Bonnefoy is clear that this routing of power always occurs. In other words, Bonnefoy is clear that no determination or decision making is performed regarding whether or not to route power to the battery 3. Although it may be possible or even, for purposes of argument, probable, the determining does not necessarily flow from Bonnefoy. Furthermore, selective routing based on such a determination does not necessarily flow from Bonnefoy. Therefore, the Examiner has failed

to show way the missing claim limitations necessarily flow from Bonnefoy and thus, for at least this reasons, the §§ 102 and 103 rejections of claim 1-8 and 19 should be reversed.

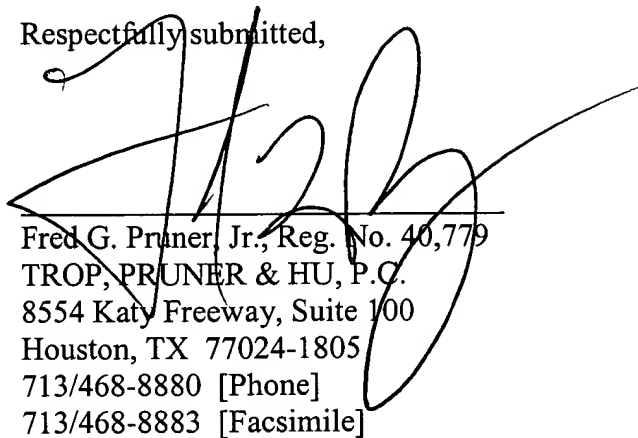
Additionally, regarding the §§ 102 and 103 rejections of claims 2-7, the circuit of Bonnefoy fails to implicitly, explicitly or inherently teach or even suggest determining whether the battery 3 is capable of receiving power (relevant to claim 2), determining whether the battery 3 is capable of being charged (relevant to claim 3) or selectively charging based on the determination (claim 4). The Examiner states that one or more of these claim limitations are inherent in Bonnefoy because the battery 3 and fuel cell system would explode.

Examiner's Answer, 14. This position highlights the improper use of alleged possibilities and probabilities by the Examiner to improperly expand the teachings of Bonnefoy to support the Examiner's inherency positions.

More particularly, Bonnefoy does not teach or even suggest that the battery 3 might explode if overcharged. If fact, Bonnefoy does not teach or even suggest that the battery 3 is even capable of overcharging and/or exploding. Therefore are many types of rechargeable batteries, such as the lead acid battery on an automobile (for example), that are charged without any determination of whether not the batteries are capable of being charged/receiving power. Furthermore, assuming, for purposes of argument, that even if the battery 3 were the type to explode if overcharged under certain conditions, it does not necessarily flow from Bonnefoy that Bonnefoy takes any measures to prevent an explosion from happening. Thus, the Examiner is improperly using the argument of inherency to expand the disclosure of Bonnefoy beyond its four corners.

Therefore, for at least these additional reasons, Applicant maintains that the §§ 102 and 103 rejections are in error and should be reversed.

Respectfully submitted,

A large, stylized handwritten signature in black ink, appearing to read 'F. Pruner', is written over the typed name and address.

Fred G. Pruner, Jr., Reg. No. 40,779
TROP, PRUNER & HU, P.C.
8554 Katy Freeway, Suite 100
Houston, TX 77024-1805
713/468-8880 [Phone]
713/468-8883 [Facsimile]

Date: July 14, 2004

APPENDIX OF CLAIMS

The claims on appeal are:

1. A method of operating a fuel cell stack, comprising:

providing a fuel flow to the fuel cell stack to produce power, at least some of the power produced by the fuel cell stack being consumed by a first load;

in response to a decrease in at least one of the power produced by the fuel cell stack and the power consumed by the first load, determining whether to route at least some of the power produced by the fuel cell stack and not consumed by the first load to a second load; and

based on the determination, selectively routing said at least some of the power produced by the fuel cell stack and not consumed by the first load to the second load.

2. The method of claim 1, wherein the determining comprises:

determining whether the second load is capable of receiving said at least some of the power produced by the fuel cell stack and not consumed by the first load.

3. The method of claim 1, wherein

the second load comprises a battery; and

the determining comprises determining whether the battery is capable of being charged using said power produced by the fuel cell stack and not consumed by the first load.

4. The method of claim 1, wherein
the second load comprises a battery; and
the selectively routing comprises selectively charging the battery based on the
determination.
5. The method of claim 4, wherein the charging comprises regulating a terminal
voltage of the battery to cause the battery to charge.
6. The method of claim 1, further comprising:
decreasing the fuel flow in response to the detection of the decrease.
7. The method of claim 6, wherein the routing occurs until the fuel flow is decreased
to a level at which the power routed to the second load is approximately zero.
8. The method of claim 1, wherein the providing comprises operating a fuel
processor to provide the fuel flow.
19. The method of claim 1, further comprising:
selectively routing said at least some of the power produced by the fuel cell stack and not
consumed by the first load between the second load and an oxidizer.